

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application.

1. (Amended) A conjugate comprising a ligand that specifically binds to a gastrin (cholecystokinin B (CCKB)) receptor, a linker, and a cytotoxic agent, in which the linker is FALA (SEQ ID NO: 1).
2. (Original) The conjugate of claim 1, wherein the ligand is a peptide or a peptidomimetic.
3. (Original) The conjugate of claim 2, wherein the peptidomimetic is a peptoid.
4. (Cancelled)
5. (Withdrawn) The conjugate of claim 1, wherein the ligand ~~is selected from the group consisting of:~~ comprises
LGPQGPPHLVADPSKKQGPWLEEEEEAYGWMDf (gastrin-34) (SEQ ID NO: 5),
an N-terminal truncated derivative of gastrin-34, ~~and or~~
W(Nle)DF (SEQ ID NO: 6).
6. (Original) The conjugate of claim 1, wherein the ligand ~~is selected from the group consisting of:~~ comprises
D(SfY)MGWMDf (SEQ ID NO: 7),
D(SfY)(Nle)GW(Nle)DF (SEQ ID NO: 8), ~~and~~
EEEAYGW(Nle)DF (SEQ ID NO: 20).
- 7.-13. (Cancelled)
14. (Previously Presented) The conjugate of claim 1, wherein the cytotoxic agent is selected from the group consisting of:
cemadotin or derivative thereof,

a derivative of cemadotin,
a derivative of hemiasterlin,
esperamicin C,
neocarzinostatin,
maytansinoid DM1,
7-chloromethyl-10,11 methylenedioxy-camptothecin,
rhizoxin, and
the halichondrin B analog, ER-086526.

15. (Original) A conjugate comprising a ligand that specifically binds to a gastrin (cholecystokinin B (CCKB)) receptor, a linker, and a cytotoxic agent, in which the linker is VLALA (SEQ ID NO: 2).

16. (Original) The conjugate of claim 15, wherein the ligand is a peptide or a peptidomimetic.

17. (Original) The conjugate of claim 16, wherein the peptidomimetic is a peptoid.

18. (Cancelled)

19. (Withdrawn) The conjugate of claim 15, wherein the ligand ~~is selected from the group consisting of:~~ comprises

LGPQGPPHLVADPSKKQGPWLEEEEEAYGWMDf (gastrin-34) (SEQ ID NO: 5),
an N-terminal truncated derivative of gastrin-34, ~~and or~~
W(Nle)DF (SEQ ID NO: 6).

20. (Original) The conjugate of claim 15, wherein the ligand ~~is selected from the group consisting of:~~ comprises

D(SfY)MGWMDf (SEQ ID NO: 7),
D(SfY)(Nle)GW(Nle)DF (SEQ ID NO: 8), and
EEEAYGW(Nle)DF (SEQ ID NO: 20).

21.-27. (Cancelled)

28. (Previously Presented) The conjugate of claim 15, wherein the cytotoxic agent is selected from the group consisting of:

cemadotin,
a derivative of cemadotin,
a derivative of hemiasterlin,
esperamicin C,
neocarzinostatin,
maytansinoid DM1,
7-chloromethyl-10,11 methylenedioxy-camptothecin,
rhizoxin, and
the halichondrin B analog, ER-086526.

29.-48. (Cancelled)

49. (Original) A conjugate comprising a ligand that specifically binds to a gastrin (cholecystokinin B (CCKB)) receptor, a linker, and a cytotoxic agent, in which the linker is ChaLALA (SEQ ID NO: 21), ChaChaLAL (SEQ ID NO: 22), NalChaLAL (SEQ ID NO: 23) or NalLALA (SEQ ID NO: 24).

50. (Original) The conjugate of claim 49, wherein the ligand is a peptide or a peptidomimetic.

51. (Original) The conjugate of claim 50, wherein the peptidomimetic is a peptoid.

52. (Cancelled)

53. (Withdrawn) The conjugate of claim 49, wherein the ligand ~~is selected from the group consisting of:~~ comprises

LGPQGPPHLVADPSKKQGPWLEEEEEAYGWMDF (gastrin-34) (SEQ ID NO: 5),
an N-terminal truncated derivative of gastrin-34, ~~and or~~ or

W(Nle)DF (SEQ ID NO: 6).

54. (Original) The conjugate of claim 49, wherein the ligand ~~is selected from the group consisting of:~~ comprises

D(SfY)MGWMDF (SEQ ID NO: 7),

D(SfY)(Nle)GW(Nle)DF (SEQ ID NO: 8), and

EEEAYGW(Nle)DF (SEQ ID NO:20).

55.-61. (Cancelled)

62. (Previously Presented) The conjugate of claim 49, wherein the cytotoxic agent is selected from the group consisting of:

cemadotin,

a derivative of cemadotin,

a derivative of hemiasterlin,

esperamicin C,

neocarzinostatin,

maytansinoid DM1,

7-chloromethyl-10,11 methylenedioxy-camptothecin,

rhizoxin, and

the halichondrin B analog, ER-086526.

63. (Previously Presented) A composition comprising the conjugate of claim 1 and a carrier.

64. (Previously Presented) A composition comprising the conjugate of claim 15 and a carrier.

65.-66. (Cancelled)

67. (Previously Presented) A composition comprising the conjugate of claim 49 and a carrier.

68. (Withdrawn) A method of delivering a cytotoxic agent in a cell-specific manner, which method comprises administering the conjugate of claim 1 to a collection of cells comprising a receptor to which the ligand of the conjugate binds, whereupon the cytotoxic agent is administered to the cells in a cell-specific manner.

69. (Withdrawn) The method of claim 68, wherein the cells are in vivo.

70. (Withdrawn) A method of delivering a cytotoxic agent in a cell-specific manner, which method comprises administering the conjugate of claim 15 to a collection of cells comprising a receptor to which the ligand of the conjugate binds, whereupon the cytotoxic agent is administered to the cells in a cell-specific manner.

71. (Withdrawn) The method of claim 70, wherein the cells are in vivo.

72.-75. (Cancelled)

76. (Withdrawn) A method of delivering a cytotoxic agent in a cell-specific manner, which method comprises administering the conjugate of claim 49 to a collection of cells comprising a receptor to which the ligand of the conjugate binds, whereupon the cytotoxic agent is administered to the cells in a cell-specific manner.

77. (Withdrawn) The method of claim 76, wherein the cells are in vivo.

78. (Withdrawn) A method of treating cancer in a mammal, which method comprises administering a cancer-treating effective amount of the conjugate of claim 1 to the mammal, whereupon the mammal is treated for cancer.

79. (Withdrawn) The method of claim 78, wherein the cancer is cancer of the lung, stomach, colon, breast, or pancreas.

80. (Withdrawn) A method of treating cancer in a mammal, which method comprises administering a cancer-treating effective amount of the conjugate of claim 15 to the mammal, whereupon the mammal is treated for cancer.

81. (Withdrawn) The method of claim 80, wherein the cancer is cancer of the lung, stomach, colon, breast, or pancreas.

82.-85. (Cancelled)

86. (Withdrawn) A method of treating cancer in a mammal, which method comprises administering a cancer-treating effective amount of the conjugate of claim 49 to the mammal, whereupon the mammal is treated for cancer.

87. (Withdrawn) The method of claim 86, wherein the cancer is cancer of the lung, stomach, colon, breast, or pancreas.

88. (Previously Presented) A conjugate comprising a ligand that specifically binds to a gastrin (cholecystokinin B (CCKB)) receptor, a linker, and a cytotoxic agent ~~agents~~, in which the linker is ALAL (SEQ ID NO: 3) ~~and the ligand specifically binds to a receptor selected from the group consisting of:~~

~~the gastrin (cholecystokinin B (CCKB)) receptor,
the cholecystokinin A (CCKA) receptor,
the somatostatin receptor,
the gastrin-releasing peptide (GRP) receptor,
the substance P (neurokinin 1 (NK1)) receptor,
the guanylin receptor, and
the vasoactive intestinal peptide 1 (VIP-1) receptor.~~

89. (Withdrawn) The conjugate of claim 88, wherein the ligand ~~is selected from the group consisting of:~~ comprises

LGPQGPPHLVADPSKKQGPWLEEEEEAYGWMDF (gastrin-34) (SEQ ID NO: 5),
an N-terminal truncated derivative of gastrin-34, ~~and or~~

W(Nle)DF (SEQ ID NO: 6).

90. (Previously Presented) The conjugate of claim 88, wherein the ligand is ~~selected from the group consisting of:~~ comprises

~~D(SfY)MGWMDF (SEQ ID NO: 7),~~

~~D(SfY)(Nle)GW(Nle)DF (SEQ ID NO: 8), and~~

EEEAYGW(Nle)DF (SEQ ID NO: 20).

91.-97. (Cancelled)

98. (Previously Presented) The conjugate of claim 88, wherein the cytotoxic agent, is selected from the group consisting of:

cemadotin,

a derivative of cemadotin,

a derivative of hemiasterlin,

esperamicin C,

neocarzinostatin,

maytansinoid DM1,

7-chloromethyl-10,11 methylenedioxy-camptothecin,

rhizoxin, and

the halichondrin B analog, ER-086526.

99.-109. (Cancelled)

110. (Previously Presented) A composition comprising the conjugate of claim 88 and a carrier.

111. (Cancelled)

112. (Withdrawn) A method of delivering a cytotoxic agent in a cell-specific manner, which method comprises administering the conjugate of claim 88 to a collection of cells

comprising a receptor to which the ligand of the conjugate binds, whereupon the cytotoxic agent is administered to the cells in a cell-specific manner.

113. (Withdrawn) The method of claim 112, wherein the cells are in vivo.

114. – 115. (Cancelled)

116. (Withdrawn) A method of treating cancer in a mammal, which method comprises administering a cancer-treating effective amount of the conjugate of claim 88 to the mammal, whereupon the mammal is treated for cancer.

117. (Withdrawn) The method of claim 116, wherein the cancer is cancer of the lung, stomach, colon, breast, or pancreas.

118.-119. (Cancelled)

120. (New) The conjugate of claim 5, wherein the cytotoxic agent, is selected from the group consisting of:

- cemadotin or derivative thereof,
- a derivative of cemadotin,
- a derivative of hemiasterlin,
- esperamicin C,
- neocarzinostatin,
- maytansinoid DM1,
- 7-chloromethyl-10,11 methylenedioxy-camptothecin,
- rhizoxin, and
- the halichondrin B analog, ER-086526.

121. (New) The conjugate of claim 6, wherein the cytotoxic agent, is selected from the group consisting of:

- cemadotin or derivative thereof,

a derivative of cemadotin,
a derivative of hemiasterlin,
esperamicin C,
neocarzinostatin,
maytansinoid DM1,
7-chloromethyl-10,11 methylenedioxy-camptothecin,
rhizoxin, and
the halichondrin B analog, ER-086526.

122. (New) The conjugate of claim 19, wherein the cytotoxic agent, is selected from the group consisting of:

cemadotin or derivative thereof,
a derivative of cemadotin,
a derivative of hemiasterlin,
esperamicin C,
neocarzinostatin,
maytansinoid DM1,
7-chloromethyl-10,11 methylenedioxy-camptothecin,
rhizoxin, and
the halichondrin B analog, ER-086526.

123. (New) The conjugate of claim 20, wherein the cytotoxic agent, is selected from the group consisting of:

cemadotin or derivative thereof,
a derivative of cemadotin,
a derivative of hemiasterlin,
esperamicin C,
neocarzinostatin,
maytansinoid DM1,
7-chloromethyl-10,11 methylenedioxy-camptothecin,
rhizoxin, and

the halichondrin B analog, ER-086526.

124. (New) The conjugate of claim 53, wherein the cytotoxic agent, is selected from the group consisting of:

- cemadotin or derivative thereof,
- a derivative of cemadotin,
- a derivative of hemiasterlin,
- esperamicin C,
- neocarzinostatin,
- maytansinoid DM1,
- 7-chloromethyl-10,11 methylenedioxy-camptothecin,
- rhizoxin, and
- the halichondrin B analog, ER-086526.

125. (New) The conjugate of claim 54, wherein the cytotoxic agent, is selected from the group consisting of:

- cemadotin or derivative thereof,
- a derivative of cemadotin,
- a derivative of hemiasterlin,
- esperamicin C,
- neocarzinostatin,
- maytansinoid DM1,
- 7-chloromethyl-10,11 methylenedioxy-camptothecin,
- rhizoxin, and
- the halichondrin B analog, ER-086526.

126. (New) The conjugate of claim 89, wherein the cytotoxic agent, is selected from the group consisting of:

- cemadotin or derivative thereof,
- a derivative of cemadotin,
- a derivative of hemiasterlin,
- esperamicin C,

neocarzinostatin,
maytansinoid DM1,
7-chloromethyl-10,11 methylenedioxy-camptothecin,
rhizoxin, and
the halichondrin B analog, ER-086526.

127. (New) The conjugate of claim 90, wherein the cytotoxic agent, is selected from the group consisting of:

cemadotin or derivative thereof,
a derivative of cemadotin,
a derivative of hemiasterlin,
esperamicin C,
neocarzinostatin,
maytansinoid DM1,
7-chloromethyl-10,11 methylenedioxy-camptothecin,
rhizoxin, and
the halichondrin B analog, ER-086526.